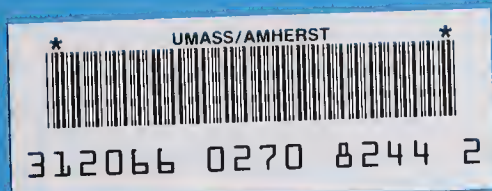
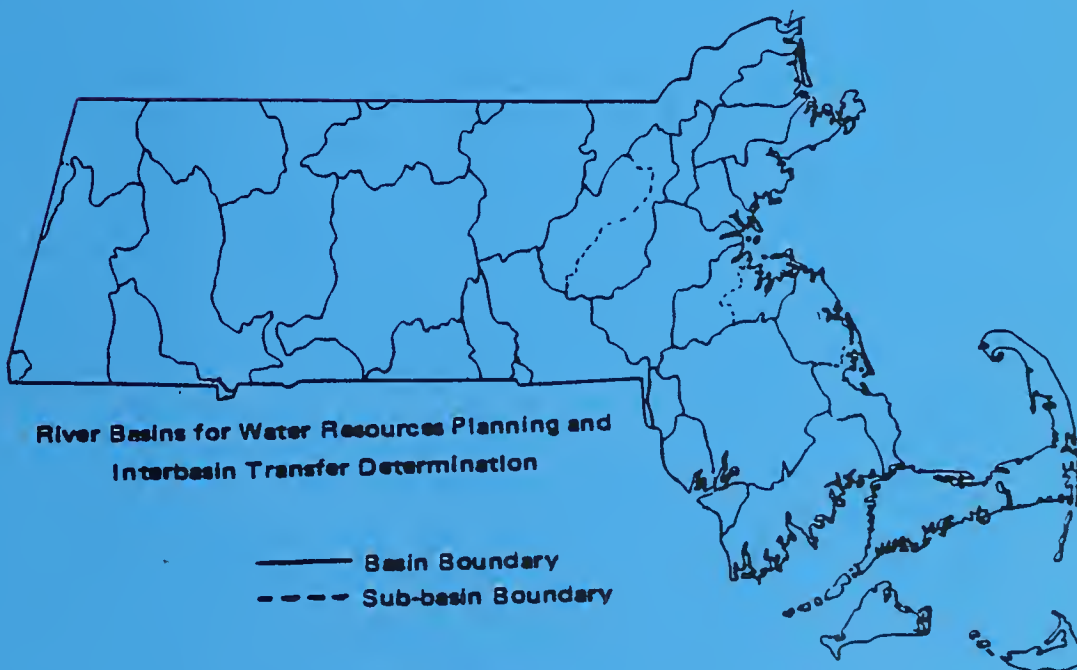


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**A Guide to the
Application of the
Interbasin Transfer Act
and Regulations**



Massachusetts Department of Environmental Management
Division of Water Resources
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A Guide to the Application of the Interbasin Transfer Act and Regulations

**Department of Environmental Management
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Chapter 21 of the General Laws is hereby amended by inserting after section 8A the following sections:

Section 8B. The following words and phrases, as used in this section and sections eight C and eight D, shall have the following meanings:

"Commission", the water resources commission.

"Interbasin transfer", any transfer of the surface and groundwaters, including wastewater, of the commonwealth outside a river basin. If a city or town partially situated within a river basin takes waters from that basin, extension of water services to a portion of the same city or town outside the basin shall not be deemed an interbasin transfer of water.

"Insignificant increase", an increase insufficient to invoke the provisions of section eight C and eight D as determined by the commission; provided, however, that in no event shall an increase over one million gallons per day be deemed insignificant.

"River basin", a geographic area within the commonwealth determined by a body of water and its surrounding drainage area as delineated by the commission.

Section 8C. Any increase over the present rate of interbasin transfers of the surface or groundwater of the river basin shall require the approval of the commission, notwithstanding the provisions of any law to the contrary to increase a present interbasin transfer in addition to such other approvals that may be required by law. Said commission shall file a report of its findings, justifications and decisions in relation to such approval or disapproval, with the clerks of the house of representatives and the senate, and with the state secretary for publication in the Massachusetts register.

Any emergency connections either approved under the provisions of sections forty and forty-one A of chapter forty, or authorized by a law to provide a necessary and adequate water supply shall be exempt from the provisions of this section for a period not to exceed six months of any calendar year, so long as they fulfill the criteria of the division of water supply of the department of environmental quality engineering.

The provisions of this section and section eight D shall not apply to any insignificant increase over the present rate of interbasin transfers of the surface and groundwater of a river basin. The criteria for determining any insignificance shall be established by the commission based upon the impact to the donor basin.

Section 8D. The commission shall promulgate rules and regulations defining and delineating the river basins of the commonwealth, and establish application procedures and criteria upon which the commission shall base its approval or disapproval of any proposed interbasin transfer of waters. Said criteria shall include but not be limited to the following:

- (1) that all reasonable efforts have been made to identify and develop all viable sources in the receiving area of the proposed interbasin transfer,
- (2) that all practical measures to conserve water have been taken in the receiving area, including but not limited to the following:
 - (a) the identification of distribution system sources of lost water, and where cost effective, the implementation of a program of leak detection and repair;
 - (b) metering of all water users in the receiving area and a program of meter maintenance;
 - (c) implementation of rate structures which reflect the costs of operation, proper maintenance and water conservation and encourage the same;
 - (d) public information programs to promote water conservation, including industrial and commercial recycling and reuse; and
 - (e) contingency plans for limiting use of water during seasonal or drought shortages;
- (3) that an environmental review pursuant to section sixty-one and sections sixty-two to sixty-two H, inclusive, of chapter thirty has been complied with for the proposed interbasin transfer,
- (4) that a comprehensive forestry management program which balances water yields, wildlife habitat and natural beauty on watershed lands presently serving the receiving area has been implemented,
- (5) that reasonable instream flow in the river from which the water is diverted is maintained, said reasonable instream flow shall be determined by the commission in making its determination of applicability of the proposed interbasin transfer of water.

The decision of the commission to approve or deny a proposed interbasin transfer shall be determined after at least two public hearings, one of which shall be held in the proposed donor community and one of which shall be held in the receiving community and which shall take place after compliance with said sections sixty-one and sixty-two to sixty-two H, inclusive, of chapter thirty. All proceedings under sections eight C and eight D shall be subject to the provisions of chapter thirty A.

I. INTRODUCTION

The Massachusetts Legislature enacted the Interbasin Transfer Act (Chapter 658, Acts of 1983) giving the Water Resources Commission the mandate to approve or disapprove any significant transfer of surface and groundwater, including wastewater, outside a river basin.

Before approval of an interbasin transfer, the Water Resources Commission shall base its decision on findings that:

1. all reasonable efforts have been made to identify and develop all viable sources in the receiving area of the proposed interbasin transfer;
2. all practical measures to conserve water have been taken in the receiving area;
3. an environmental review (MEPA), pursuant to section sixty-one and section sixty-two to sixty-two H, inclusive, of Chapter 30 has been complied with for the proposed interbasin transfer;
4. a comprehensive forestry management program which balances water yields, wildlife habitat and natural beauty on watershed lands presently serving the receiving area has been implemented;
5. a reasonable instream flow in the river from which the water is diverted is maintained.

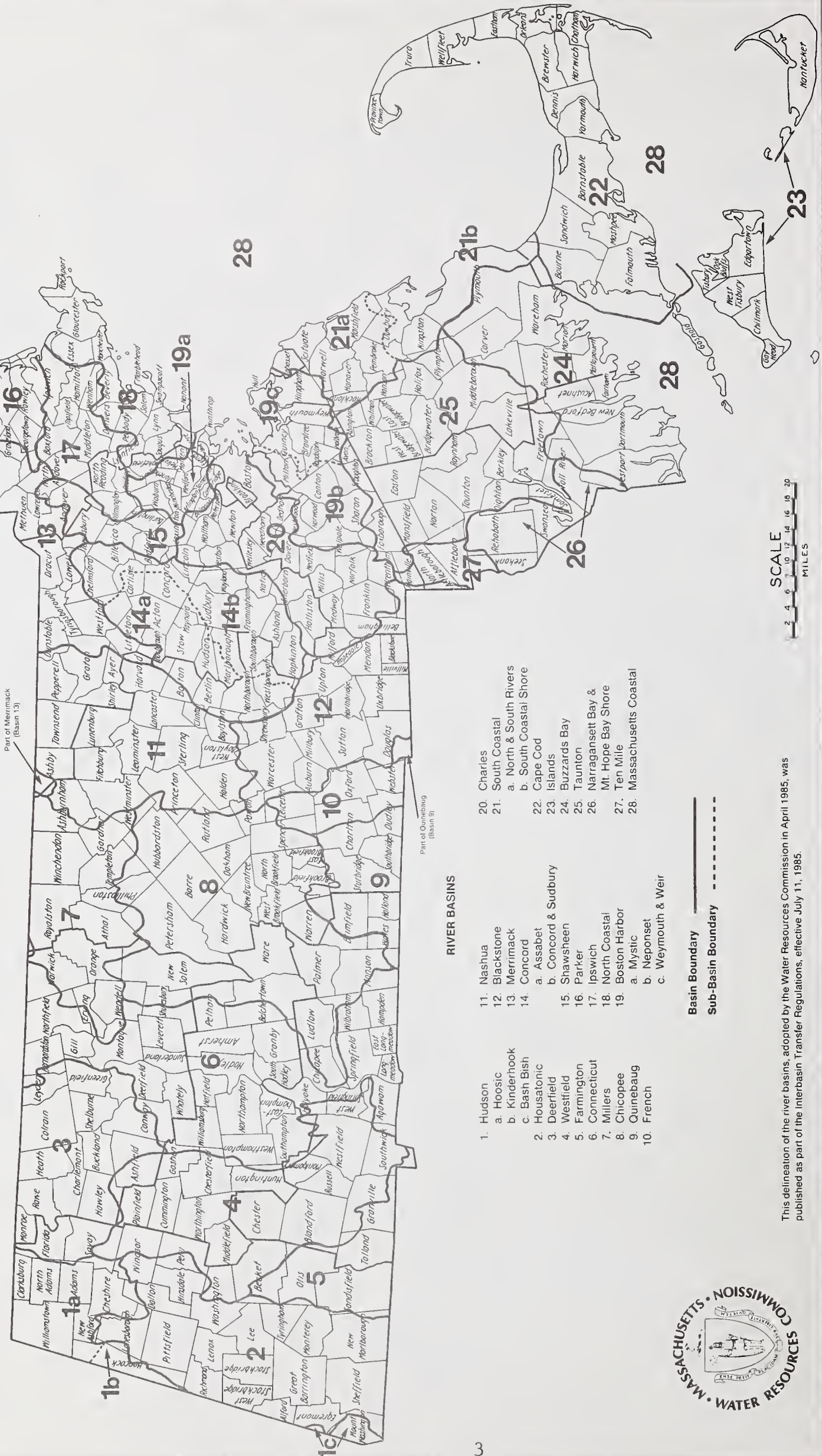
Pursuant to the Act, the Water Resources Commission promulgated regulations (313 CMR 4.00) defining and delineating the river basins of the Commonwealth, and establishing application procedures and criteria upon which the Commission shall base its approval or disapproval of any proposed interbasin transfer.

II. PREPARATION OF THE REGULATIONS

The Commission established the Water Resources Planning Task Force to serve as an advisory committee to help develop the interbasin transfer regulations and to assist the Commission on a long term basis in performing its water planning and coordination responsibilities. The Task Force consists of representatives from the agencies in the Executive Office of Environmental Affairs, federal water planning agencies, regional planning agencies, environmental organizations, watershed associations and the water supply industry. The regulations went through six drafts and an estimated sixty percent of the contents of the hearing draft was language and ideas submitted by the members of the Task Force. In addition, legal counsel was obtained from the Departments of Environmental Management and Environmental Quality Engineering, and input received from the regional engineers of DEQE and the superintendents of municipal water supply systems.

The Commission held five public hearings and incorporated many of the comments received into the Interbasin Transfer Regulations adopted in 1985. The regulations were officially promulgated on July 11, 1985.

RIVER BASINS FOR WATER RESOURCES PLANNING AND INTERBASIN TRANSFER DETERMINATION



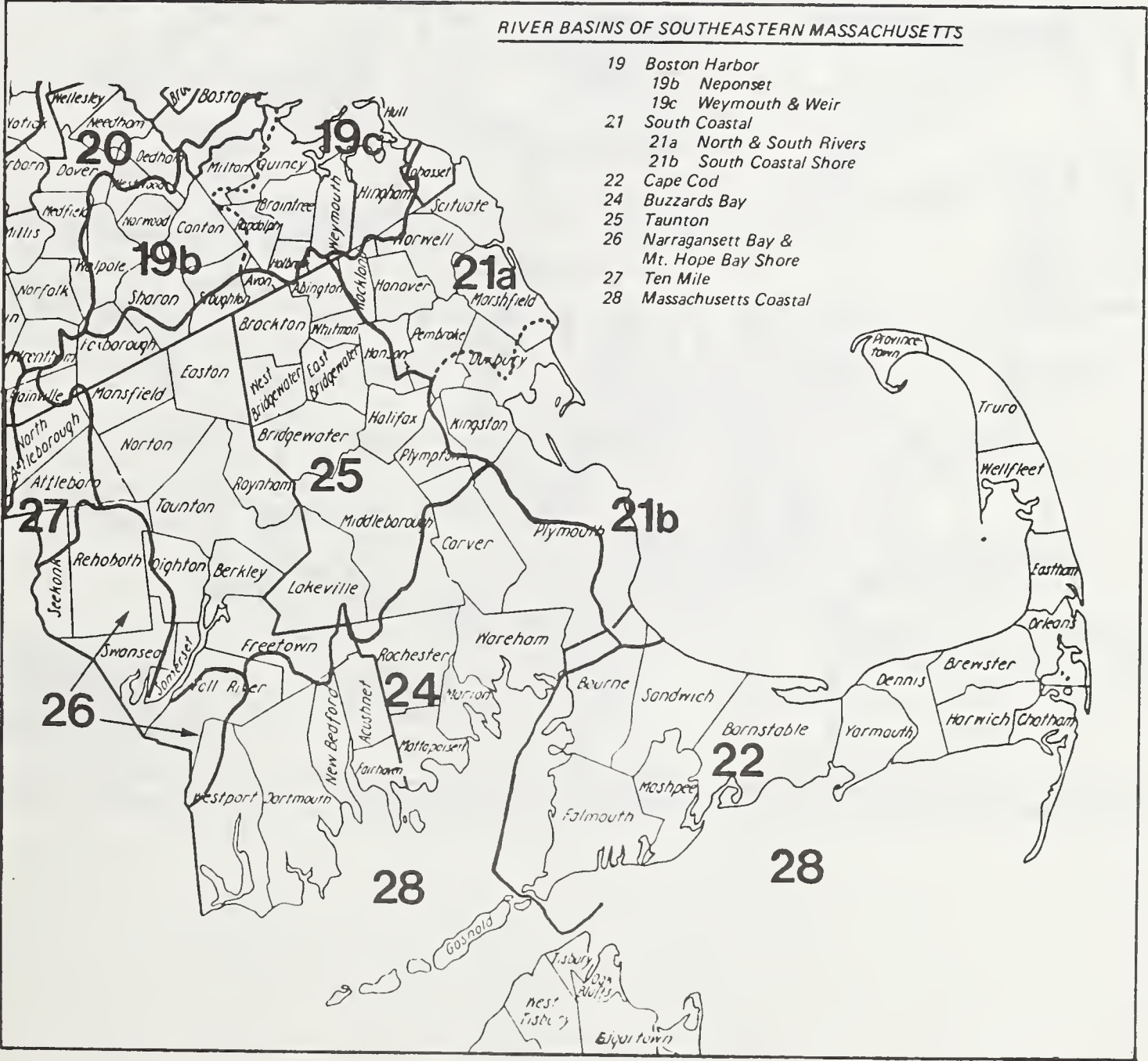
This delineation of the river basins, adopted by the Water Resources Commission in April 1985, was published as part of the Interbasin Transfer Regulations, effective July 11, 1985.

III. RIVER BASINS OF THE COMMONWEALTH

A river basin map was developed with input from the agencies of the Executive Office of Environmental Affairs, the Water Resources Planning Task Force and Commission members and incorporated into the Interbasin Transfer Regulations. A river basin is defined as a geographic area within the Commonwealth determined by a body of water and its surrounding drainage area. The river basin map consists of twenty-seven basins on the mainland and a twenty-eighth basin (Massachusetts Coastal) which includes those areas within the Commonwealth lying below the mean high tide elevation. The Hudson, Concord, Boston Harbor and South Coastal River Basins have significant sub-basins which are shown for informational purposes only.

The map is hydrologically correct through April, 1985. However, research continues by the U.S. Geological Survey and the Massachusetts Division of Water Pollution Control and basin boundaries may be redefined slightly. The Commission shall make the final determination of the precise location of a basin boundary line if in question.

The map below highlights the river basins of southeastern Massachusetts because examples to follow are from this part of the state.

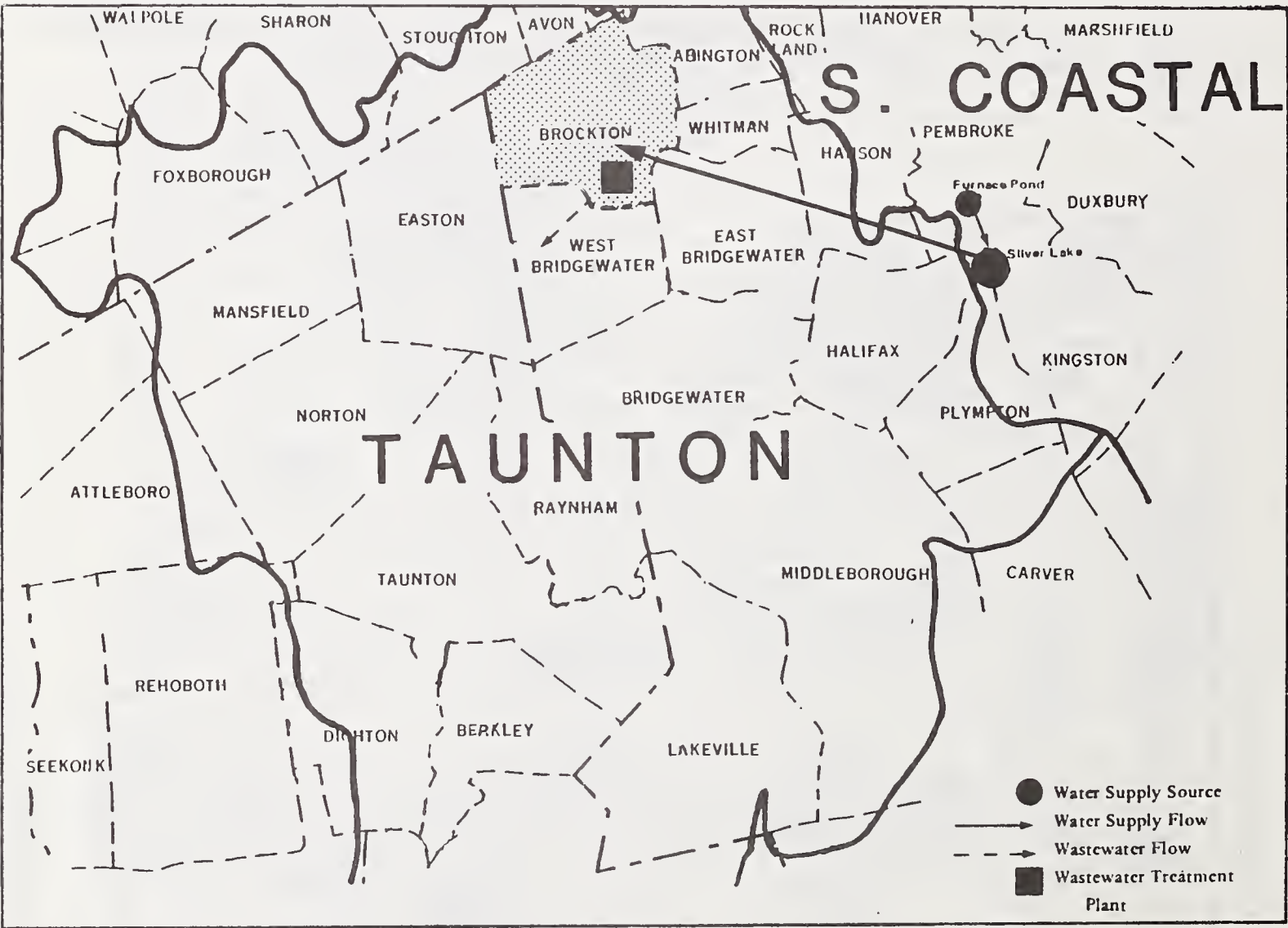


IV. REGULATION OVERVIEW

A. DEFINITION OF INTERBASIN TRANSFER

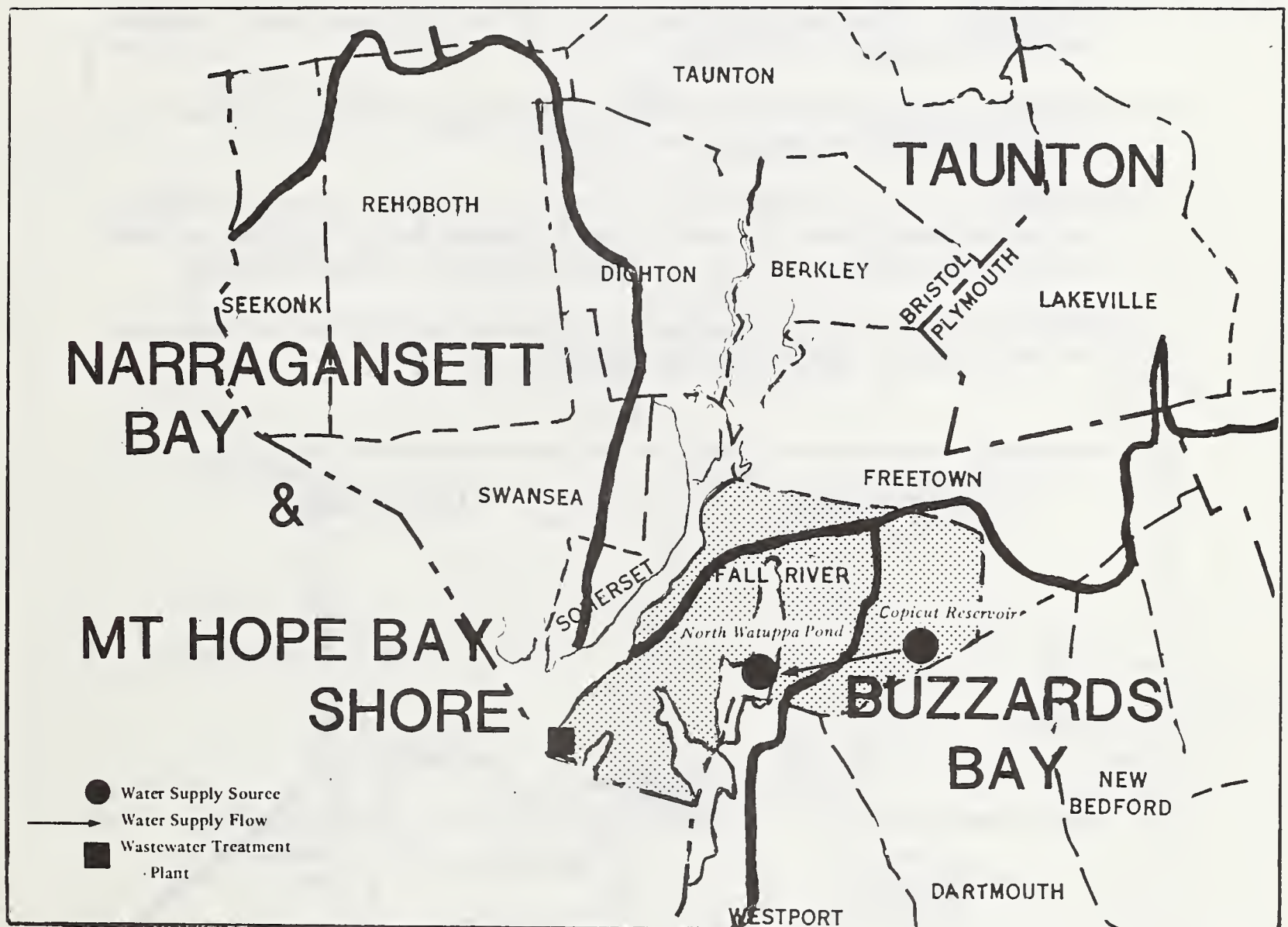
An interbasin transfer is defined as any transfer of the surface and groundwater, including wastewater of the Commonwealth outside a river basin. A water transfer must cross one of the basin boundaries and a municipal boundary line to be considered an interbasin transfer.

The water supply flow from Silver Lake (located in Kingston, Plympton and Pembroke) to the City of Brockton is an example of an interbasin transfer. Silver Lake is located in the South Coastal Basin and Brockton in the Taunton Basin. Brockton discharges its wastewater through a treatment plant located on the Salisbury River which is a tributary of the Taunton River.



B. INTRA-TOWN EXEMPTION

The city of Fall River provides an example of a flow of water across a basin line that is not an interbasin transfer. The Act states "If a city or town partially situated within a river basin takes water from that basin, extension of water services to a portion of the same city or town outside the basin shall not be deemed an interbasin transfer of water". Fall River is located in three river basins; Buzzards Bay, Narragansett Bay and Mt. Hope Bay Shore, and the Taunton. One portion of the city's water supply comes from that section of Fall River located in the Buzzards Bay Basin. This water is consumed in the city and is discharged, as effluent, from the city's wastewater treatment plant located in the Narragansett Bay and Mt. Hope Bay Shore section of Fall River.

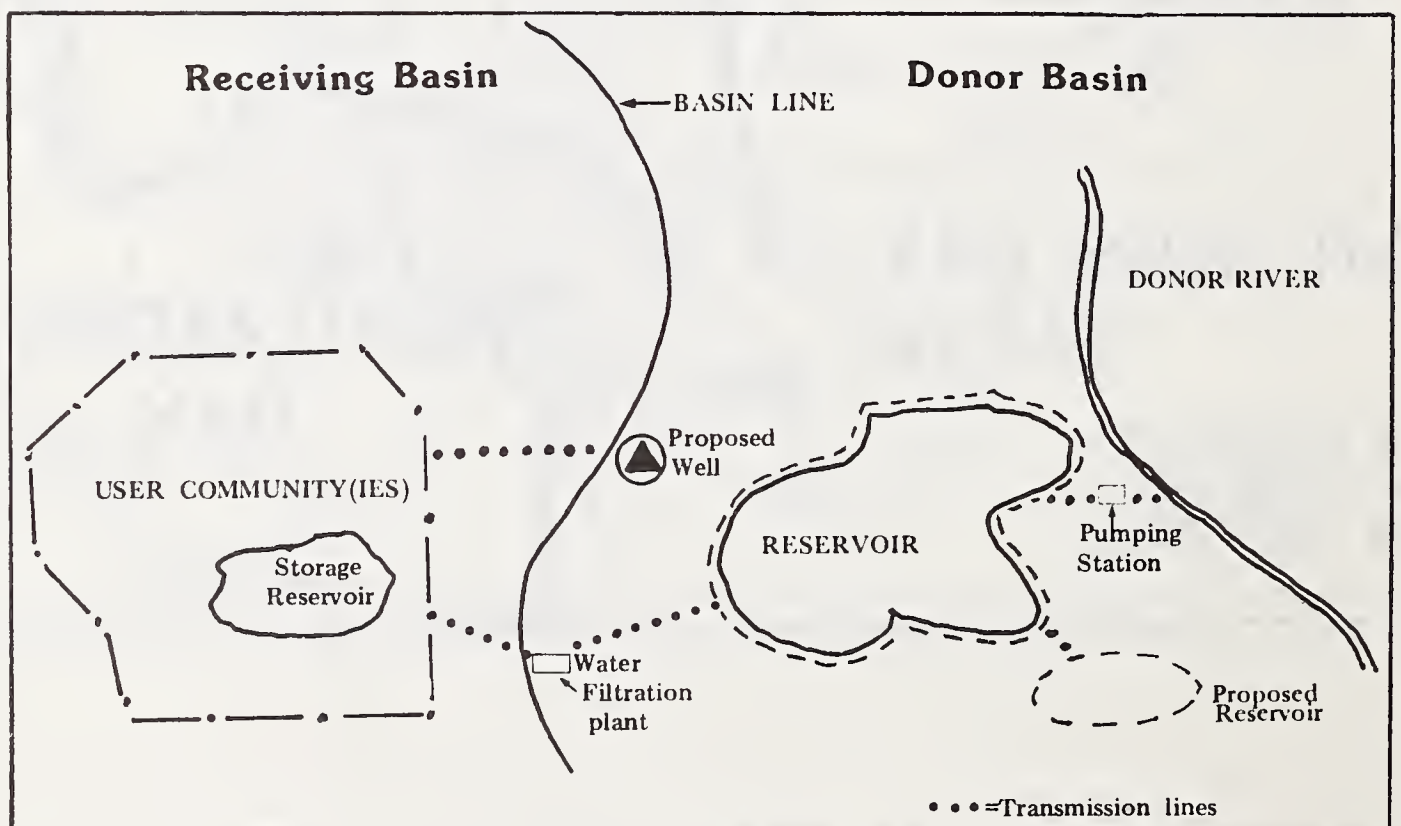


C. ACTIONS SUBJECT TO COMMISSION REVIEW

Commission review is triggered by actions that increase the ability to transfer water or wastewater out of the donor basin over the present rate of interbasin transfer. The present rate of interbasin transfer in a water supply system or wastewater conveyance system means the hydraulic capacity of an interbasin transfer system which was authorized, constructed and useable for water supply or wastewater conveyance purposes without additional installation of facilities or changes in any operating rule prior to the effective date of the act (March 8, 1984).

Actions include but are not limited to:

1. Drilling of production wells
2. Enlargement of reservoir storage capacity
3. Building of transfer facilities, such as pumps, pipelines, tunnels or other conveyance facilities
4. Building of water filtration plants where such plants increase the ability to transfer water out-of-basin
5. Changes in any withdrawal constraints contained in any provision of the Massachusetts General Laws, Special Acts, Judicial decree, regulatory agency rule or operating rule of a water supplier
6. Structural change in a wastewater system that causes an increase in the transfer out of a donor basin



An example of an action that would be subject to Commission review is the proposed Pine Brook Reservoir being considered to augment Brockton's water supply system. The proposed Pine Brook Reservoir is located in the South Coastal River Basin. This water would be transferred to Brockton's main reservoir, Silver Lake. From there the water would be transferred to Brockton in the Taunton Basin for ultimate discharge into a tributary of the Taunton River.



D. ACTIONS EXEMPT FROM COMMISSION REVIEW

The regulations grandfather existing capability to transfer water or wastewater out of a donor basin, which was authorized, constructed and useable without additional installation of facilities, prior to the effective date of the Act. This includes maintenance and replacement type activities that would not increase the ability to transfer water out of a donor basin. The following actions are exempt from Commission review:

1. Replacement of pumps or pipes of similar conveyance capacity.
2. Restoration of reservoirs to original storage capacity.
3. Renovation of existing wells and testing of new well sites.
4. Construction of conveyance facilities in the donor basin if the sole purpose is to provide redundancy provided that any increase in capacity cannot be used to increase the ability to transfer water, on an annualized basis, out of the donor basin.
5. Replacement of existing wastewater conveyance facilities as long as they do not exceed the operational capacity (including surcharge capacity) prior to the effective date of the act and providing the facilities conform to a current 303 basin plan.
6. The installation and use of water supply and wastewater facilities, which although not fully constructed and/or useable, have achieved prior to the effective date of the act, MEPA compliance and approval by the Department of Environmental Quality Engineering.
7. Extension of the distribution and/or wastewater collection system; replacement of distribution or collection system pipes of a larger size or installation; replacement or enlargement of water mains within the receiving area that do not increase the existing hydraulic capacity to transfer water out of a donor basin.
8. Enlargement of the receiving area, which does not necessitate increasing the existing hydraulic capacity, to transfer water out of a donor basin.
9. Emergency connections to provide a necessary and adequate water supply provided that DEQE grants approval under Chapter 40, Sections 40 & 41A, the period of occurrence does not exceed six months of any calendar year and all conditions imposed by DEQE are met.

E. DETERMINATION OF APPLICABILITY AND/OR INSIGNIFICANCE

The regulations provide for a two-tier approach to Commission review. The first level is a determination of applicability and/or insignificance. The Commission will review a proposed action to determine if it is an interbasin transfer as defined in the Act and Regulations and thus subject to Commission review. The Commission will also review proposed actions to increase over the present rate of interbasin transfer by less than one million gallons per day to determine if they are insignificant and thus not subject to Commission review.

The information required to be submitted for Commission determination of applicability and/or insignificance is limited and the Commission's decision is based upon criteria contained in the regulations.

The following diagram outlines the process for the Commission to make a determination of applicability and/or insignificance.

<u>STEPS</u>	<u>TIME PERIOD</u>
1. <u>REQUEST FOR DETERMINATION</u> prepared on form available from WRC.	
2. <u>NOTICE OF RECEIPT</u> of the request published in the the MEPA Environmental Monitor and sent to the municipalities directly affected.	within 31 days after receipt of request
3. <u>REQUEST REVIEWED</u> and staff recommendation prepared - additional information can be re- quested by WRC.	
4. <u>DETERMINATION OF INSIGNIFICANCE</u> made by WRC - decision must receive majority roll call vote during a public meeting of the WRC.	within 90 days of receipt of request or receipt of requested additional information.
5. <u>REQUESTER NOTIFIED</u> of WRC action.	
6. <u>WRC DETERMINATION</u> with reasons for decision printed in the MEPA Environmental Monitor.	

F. APPLICATION FOR APPROVAL OF AN ACTION TO INCREASE OVER THE PRESENT RATE OF INTERBASIN TRANSFER

The second level of review is an application to the Commission for approval of an action to increase over the present rate of interbasin transfer. The depth of information required is comprehensive but tempered by the expressed intention that the level of information be sufficient for the Commission to conduct the required review.

If the proposed action requires the preparation of a MEPA Environmental Impact Report (EIR), the regulations provide that the data required for Commission review should be prepared, to the extent possible, as a component of the EIR. Where feasible and desired by the parties, joint scoping sessions with the MEPA and Commission staff and the proponent shall be held.

The regulations establish criteria to guide the Commission in its review and provide for public hearings and MEPA compliance before final Commission decision.

The following diagram outlines the process for the Commission to review an application for approval of an action to increase over the present rate of interbasin transfer.

<u>STEPS</u>	<u>TIME FRAME</u>
1. <u>PREAPPLICATION CONFERENCE</u>	
a. Proponents of a proposed action meet with WRC staff for informal discussions early in project planning process.	
2. <u>COORDINATION WITH MEPA</u>	
a. MEPA and WRC staff and proponents hold joint scoping session(s) where feasible and desired by the parties.	
b. If proposed action requires completion of an Environmental Impact Report (MEPA), the data required by these regulations should be prepared, to the extent possible, as a component of the EIR.	
3. <u>RECEIPT OF APPLICATION</u>	
Application for Approval prepared on application form available from WRC.	

STEPS

TIME FRAME

9. WRC STAFF REVIEW

- a. Application, additional information submitted, MEPA documents, hearing records reviewed and recommendation prepared by WRC staff.
- b. Review period may be extended upon written consent of the WRC and applicant for a mutually agreed upon period.

10. WRC DECISION

Approval or disapproval of proposed interbasin transfer by WRC requires a majority roll call vote during a public meeting.

Within 60 days of completing the hearings.

11. FILING OF COMMISSION DECISION

Written report by WRC staff of the findings and justification of its decision filed with House and Senate Clerks and the Secretary of State.

Within 30 days of WRC final action.

12. PUBLICATION OF DECISION

Secretary of State published decision of WRC in the Massachusetts Register.

Before approval of a proposed interbasin transfer, the Water Resources Commission shall base its decision on findings that the proponent has:

- 1. Made all reasonable efforts to identify and develop all viable sources in the receiving area of the proposed interbasin transfer
- 2. Taken all practical measures to conserve water in the receiving area
- 3. Complied with the MEPA review process for the proposed interbasin transfer
- 4. Implemented a comprehensive forestry management program on watershed lands serving the receiving area and under control of the proponent
- 5. Demonstrated that a reasonable instream flow is maintained in the river from which the water is diverted

The regulations define all practical measures to conserve water in the receiving area to include but not limited to the following:

1. The identification of distribution system sources of lost water, and where cost effective, the implementation of a program of leak detection and repair
2. Metering of all water users in the receiving area and a program of meter maintenance
3. Implementation of rate structures which reflect the costs of operation, proper maintenance, proposed capital improvements and water conservation and which encourage the same
4. Public information programs to promote water conservation, the use of water conserving devices, and industrial and commercial recycling and reuse
5. Contingency plans for limiting use of water during seasonal or drought shortages
6. Implementation of land use controls to protect existing water supply sources of the receiving area that meet the requirements of the Department of Environmental Quality Engineering published in 310 CMR 22.20

The regulations provide that the Commission shall take into consideration in determining reasonable instream flow the impact of the proposed interbasin transfer on the streamflow dependent ecosystems and water uses to include:

1. Length of stream below the point of withdrawal
2. Effects on flood flows, intermediate flows and low flows
3. Effect on groundwater and surface water elevations
4. Significance of indigenous and anadromous fisheries and effects of the proposed interbasin transfer on these fisheries
5. Significance of wetlands and dependent flora and fauna and effects thereon
6. Effect on water quality, recreational uses, aesthetic values, areas of critical environmental concern and areas protected under Article 97 of the Amendments to the Massachusetts Constitution
7. Effect on established riparian uses and uses dependent on recharge from streamflow
8. Effect on hydropower production
9. Effect on other water withdrawals and undeveloped rights within the donor basin
10. Effect on other instream uses

V. KEY ADDRESSES

1. Interbasin Transfer Regulations

Copies of the Interbasin Transfer Regulations (313 CMR 4.00) can be obtained by contacting the Massachusetts State Bookstore, Room 116, State House, Boston, MA 02133. (617) 727-2834

2. Application Forms and River Basin Maps

Application forms and maps of the Massachusetts River Basins may be obtained from the Water Resources Commission, 20th Floor, 100 Cambridge Street, Boston, MA 02202. (617) 727-9800

3. Pre-application Conference

Proponents of a proposed interbasin transfer are encouraged to discuss their plans with Commission staff as early as possible in the project planning stage. Contact the Executive Director at the Water Resources Commission, 20th Floor, 100 Cambridge Street, Boston, MA 02202. (617) 727-9800

4. Submission of Applications

All applications and requested additional information should be submitted to: Executive Director, Water Resources Commission, 20th Floor, 100 Cambridge Street, Boston, MA 02202

